How did the hydroponic, and aquaponic systems, and vermicomposting system first start?

During the strategic planning for our greenhouse classroom, YFS took inspiration from similar New York Sun Works' classrooms in NYC public schools, which feature hydroponics, aquaponics, traditional growing systems, and vermicomposting units. We want children and youth enrolled in YFS' programs to have opportunities to experience and learn from all these systems, especially since our growing season for outdoor gardening is relatively short.

What improvements have you made since then?

The quality of our garden classes has improved through evaluations of youth engagement and adjusting where they are needed, whether that be increasing hands-on activities or shifting to more age-appropriate lessons. We strive to maintain a healthy relationship with program teachers and specialists that bring youth to classes so we can sustain their support and dedication for our work.

Our greenhouse classroom has full-time management which allows us to maintain a clean and very green space where we successfully grow hydro- and aquaponics produce and start our seedlings for our outdoor growing locations.

We have also become more aware of the needs for each of our growing locations to ensure healthy production and a healthy amount of manual labor for staff and volunteers. With the guidance of local producers and community South Dakota State University's Extension personnel, we have identified those needs such as automated irrigation, proper storage facilities, and shade cloth, to name a few.

What challenges have you faced over the years?

Weather/drought, "feast or famine" funding (it's hard to keep developing the program during the "famine" years), Soil testing and adapting to results of contamination, and the COVID pandemic that kept kids at home and continues to shut down classrooms.

How much time and effort goes into your garden?

YFS' Fullerton Farm has currently contracted with one individual who works part-time during the growing season. They are tasked with maintaining production at the farm with periodic assistance from the Farm-to-School Project Manager/Garden Education Specialist. The Project Manager/Garden Education Specialist utilizes garden class time with the youth during the week to coordinate a group effort of maintaining the growing locations (watering, weeding, mulching, planting, etc.). This leaves 2-3 hours of excess supervision additional care on weekends and in between class times to have ensure good harvests during the peak growing season. This work can be minimized with drip irrigation, shade cloth, and mulching.

How much of your produce is used in the meals for children?

Approximately 75% of our produce went to YFS' Nutrition Services in 2021, while approximately 25% went directly to families enrolled in YFS programs.

What tips or advice do you have for other childcare providers starting out their own gardens?

Keep gardens a manageable size. Install irrigation systems. Develop a Garden Planning Committee. Invite children's ideas and input. Children who are involved in growing and preparing food are more likely to eat it. Establish relationships with community gardeners and local farmers. You will be surprised how much knowledge, resources, and time they generously share and how much they really care about fresh food for kids. Celebrate your harvests!